



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,132	01/28/2004	Patrick Blanc	Q79339	3583
23373	7590	07/12/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LOFTIN, CELESTE	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/765,132	BLANC ET AL.	
	Examiner Celeste L. Loftin	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 17 April 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-16 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that nowhere do the cited references, alone or in combination, teach or suggest changing from a second generation cell to a third generation cell, when a terminal having a circuit connection setup in a second generation cell requests a simultaneous packet connection or when a terminal already having a packet connection in a second generation cell requests a simultaneous circuit connection as set forth in claim 1. However, Hasan discloses handing over a mobile terminal from a 2G circuit switched radio telecommunications network to a 3G IP-based radio telecommunications network. This includes the steps of establishing a call from the mobile in the 2G network, determining that the mobile terminal is requesting service that requires 3G network coverage and handing over the terminal from a 2G network to 3G network. Applicant argues that Soininen et al. applies to specifically to a 3G network, however Soininen discloses establishing simultaneous circuit-switched and packet-switched connections of the network, which could comprise one or more core networks.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasan et al. (Hasan), **WO/0131963** in view of Soininen et al. (Soininen), **U.S. Publication 10,482,047**.

Regarding claim 1, Hasan discloses a method for establishing simultaneous access to circuit services and packet services in a cellular mobile radio system comprising second-generation cells and third generation cells the method comprising: determining whether a change of cell to a third generation cell is possible if a terminal already has one of a circuit connection and a packet connection already set up in a second generation cell and requests the other one of circuit connection and the packet connection (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) (pg. 3 lines 1-5, pg. 2 lines 18-32); and

performing said change of cell in order to allow packet connections (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) (pg. 3 lines 1-10, pg. 2 lines 28-32).

Hasan fails to disclose allowing said circuit and packet connections simultaneously in a third generation cell.

In a similar field of endeavor, Soininen discloses allowing said circuit and packet connections simultaneously in a third generation cell (Ann is initiates a call and the RCA determines that a circuit switched connection is best, then Bob decides to open a whiteboard session and the RCA determines that parallel (i.e. simultaneous) circuit switched and packet switched connection should preferably be used) (**pg. 3 paragraph [0033] and [0035], pg. 2 paragraph [0026]**)).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify Hasan to include allowing said circuit and packet connections simultaneously in a third generation cell. Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Regarding claim 2, the combination discloses a method according to claim 1. Hasan further discloses wherein the network determines if said change of cell is possible (reads on as the caller enters an area of 3G coverage the decision to perform a handover must be made) (**page 5 lines 11-16**).

Regarding claim 3, the combination discloses a method according to claim 1. Hasan further discloses wherein, if the terminal has the circuit connection already set up in the second generation cell, said change of cell is an intercellular transfer (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) (**pg. 3 lines 1-5, pg. 2 lines 18-32**).

Regarding claim 4, the combination discloses a method according to claim 1.

Hasan discloses if said connection already set up in a second-generation cell (the MT scans for 3G coverage but there is none, so the subscriber makes a 2G voice call and at a later time detects a 3G signal) (**page 6 lines 13-18**) , and said change of cell is ordered by the network (reads on as the caller enters an area of 3G coverage the decision to perform a handover must be made) (**page 5 lines 11-20**).

Hasan fails to disclose if said connection already set up is a packet connection.

Soininen further discloses wherein if said connection already set up is a packet connection (reads on since the terminals are already engaged in a PS call) (**paragraph [0041]**).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include if said connection already set up is a packet connection. Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Regarding claim 5, the combination discloses a method according to claim 1. Hasan further discloses wherein the terminal signals to a network that it requests said other one of the circuit connection and the packet connection (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) (**pg. 3 lines 1-5, pg. 2 lines 18-32**) and the network determines if said change of cell is possible (reads on as the caller

enters an area of 3G coverage the decision to perform a handover must be made)
(page 5 lines 11-20).

Regarding claim 6, the combination discloses a method according to claim 5. Soininen further discloses wherein the terminal signals to a network that it requests a simultaneous packet connection by sending the network a request to operate in dual transfer mode (RCA (located in the terminal (see *figure 2 element 21*)) decides that a parallel CS and PS connections should be used, the application signals the IP stack to initiate the whiteboard session) **(paragraph [0033] and [0035]).**

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include wherein the terminal signals to a network that it requests a simultaneous packet connection by sending the network a request to operate in dual transfer mode. Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Regarding claim 7, the combination discloses a method according to claim 6. Hasan discloses having the circuit connection already set up in said second generation cell signals to the network that a packet connection is required (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) **(pg. 3 lines 1-5, pg. 2 lines 18-32);** and receiving said signaling, the network determines if said change of cell is possible

(reads on as the caller enters an area of 3G coverage the decision to perform a handover must be made) **(page 5 lines 11-20)**.

Soininen further discloses the terminal supporting simultaneous circuit services and packet services and sending the network a request to operate in dual transfer mode (RCA (located in the terminal (*see figure 2 element 21*)) decides that a CS connection is preferred, then when another terminal initiates a whiteboard session the RCA decides that parallel connection is desirable between CS and PS) **(paragraph [0033] and [0035])** and wherein a second generation cell not supporting simultaneous circuit services and packet services signals falsely to terminals in said cell that it supports simultaneous circuit services and packet services (a mobile station may initiate a GPRS routing area update procedure for intersystem handover however a mobile station in class B mode may provide simultaneous support **but** it may need to put the other connection on hold for the time it is processing other connection) **(paragraph [0037])**.

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include wherein a second generation cell not supporting simultaneous circuit services and packet services signals falsely to terminals in said cell that it supports simultaneous circuit services and packet services and the terminal supporting simultaneous circuit services and packet services and sending the network a request to operate in dual transfer mode (RCA (located in the terminal and . Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Regarding claim 8, the combination discloses a method according to claim 5. Soininen further discloses wherein the terminal signals to a network that it requests a simultaneous circuit connection (terminals are already engaged in PS a call and it is assumed that the adaptation layer decides that a CS bearer should be used and the CS call is then established at the same time) (**paragraph [0041], [0042], and [0043]**) by sending the network a packet session suspension request (a mobile station may also provide simultaneous support for the packet switched and circuit switch connections, it may need to put the other connections on hold) (**paragraph [0037]**).

Regarding claim 9, the combination discloses a method according to claim 1. Hasan further discloses wherein, when said change of cell has been performed, a network (i.e. the HLR/HSS is a part of the 3G network) (**see figure 1 element 14**) automatically initiates setting up of the connection in said third generation cell by sending the terminal a paging message (the HLR/HSS verifies that the user has a 3G subscription and chooses an Anchor GGSN and a properly located SGSN to service the MT after the handover) (**page 5 lines 15-21**).

Regarding claim 10, the combination discloses a method according to claim 9. Hasan further discloses wherein, said second generation cell sends said third generation cell information necessary for automatically initiating setting up of the connection by the network (the MT periodically scan for 3G coverage and when it is detected the MSC sends the “3G handover message” (contains the IMSI of the MT) to the 3G HLR) (**page 8 lines4-11**).

Regarding claim 11, the combination discloses a method according to claim 1.

Hasan discloses wherein, when said change of cell has been performed, the terminal initiates setting up of the connection in said third generation cell (after handover is completed the 3G service trigger launches pre-registration (a service that is initiated by the MT)) (**page 6 lines 13-25**).

Regarding claim 12, Hasan discloses a mobile terminal for a mobile radio system comprising second-generation cells and third generation cells the mobile terminal comprising;

means for, if the mobile a terminal already has one of a circuit connection and a packet connection already set up in a second generation cells signaling to a network that it requests the other one of the circuit connection and the packet connections in order to allow said circuit connection and packet connection simultaneously in a third generation cells (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) (**pg. 3 lines 1-5, pg. 2 lines 18-32**).

Regarding claim 13, Hasan discloses a mobile radio access network equipment for a mobile radio system comprising second-generation cells and third generation cells the mobile radio access network equipment comprising:

means for determining whether a change of cell to a third generation cell is possible if a terminal already has one of a circuit connection and a packet connection already set up in a second generation cell and requests the other one of circuit

connection and the packet connection (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) (**pg. 3 lines 1-5, pg. 2 lines 18-32**); and

means for performing said change of cell in order to allow packet connections (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) (**pg. 3 lines 1-5, pg. 2 lines 18-32**).

Hasan fails to disclose allowing said circuit and packet connections simultaneously in a third generation cell.

In a similar field of endeavor, Soininen discloses allowing said circuit and packet connections simultaneously in a third generation cell (Ann initiates a call and the RCA determines that a circuit switched connection is best, then Bob decides to open a whiteboard session and the RCA determines that parallel (i.e. simultaneous) circuit switched and packet switched connection should preferably be used) (**pg. 3 paragraph [0033] and [0035], pg. 2 paragraph [0026]**)).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify Hasan to include allowing said circuit and packet connections

simultaneously in a third generation cell. Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Regarding claim 14, Hasan discloses 14. (currently amended): ' A mobile ' core network equipment for a mobile radio system comprising second generation cells and third generation cells, the mobile core network equipment comprising:

means for determining whether a change of cell to a third generation cell is possible if a terminal already has one of a circuit connection and a packet connection already set up in a second generation cell and requests the other one of circuit connection and the packet connection (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) **(pg. 3 lines 1-5, pg. 2 lines 18-32)**; and

means for performing said change of cell in order to allow packet connections (the method includes the steps of establishing a call (i.e. circuit connection) from a mobile terminal in the 2G network and determining that the mobile is requesting a service that requires 3G network coverage (i.e. IP-based or packet connection) and handing over the mobile terminal from the 2G network to the 3G network) **(pg. 3 lines 1-5, pg. 2 lines 18-32)**.

Hasan fails to disclose allowing said circuit and packet connections simultaneously in a third generation cell.

In a similar field of endeavor, Soininen discloses allowing said circuit and packet connections simultaneously in a third generation cell (Ann initiates a call and the RCA determines that a circuit switched connection is best, then Bob decides to open a whiteboard session and the RCA determines that parallel (i.e. simultaneous) circuit switched and packet switched connection should preferably be used) (pg. 3 paragraph [0033] and [0035], pg. 2 paragraph [0026])).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify Hasan to include allowing said circuit and packet connections simultaneously in a third generation cell. Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Regarding claim 15, the combination discloses a mobile terminal according to claim 12. Soininen further discloses comprising means for signaling to a network that it requests a simultaneous packet connection by sending the network a request to operate in dual transfer mode (RCA (located in the terminal (see *figure 2 element 21*)) decides that a parallel CS and PS connections should be used, the application signals the IP stack to initiate the whiteboard session) (paragraph [0033] and [0035]).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify Hasan to include comprising means for signaling to a network that it requests a simultaneous packet connection by sending the network a request to operate in dual transfer mode. Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Regarding claim 16, the combination discloses a mobile terminal according to claim 12. Soininen further discloses comprising means for signaling to a network that it requests a simultaneous circuit connection (terminals are already engaged in PS a call and it is assumed that the adaptation layer decides that a CS bearer should be used and the CS call is then established at the same time) (**paragraph [0041], [0042], and [0043]**) by sending the network a packet session suspension request (a mobile station may also provide simultaneous support for the packet switched and circuit switch connections, it may need to put the other connections on hold) (**paragraph [0037]**).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include comprising means for signaling to a network that it requests a simultaneous circuit connection by sending the network a packet session suspension request. Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celeste L. Loftin whose telephone number is 571-272-2842. The examiner can normally be reached on Monday thru Friday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CL



JOSEPH FEILD
SUPERVISORY PATENT EXAMINER